

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE				ATTY. DOCKET NO. NSL-022		SERIAL NO. 10/771,092	
LIST OF PRIOR ART CITED BY APPLICANT (Use several sheets if necessary)				APPLICANT Brian M. Sager et al.			
				FILING DATE 2/2/04		GROUP 1709	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
/AH/	A	5,482,570	1/9/1996	Saurer et al.	136	255	6/22/1994
	B	6,270,846	8/7/2001	Brinker et al.	427	385.5	3/2/2000
	C	6,340,789	1/22/2002	Petritsch et al.	136	263	9/15/2000
	D	6,278,056	8/21/2001	Sugihara et al.	136	263	3/18/1999
	E	5,525,440	6/11/1996	Kay et al.	429	111	11/2/1993
	F	2002/0134426A1,	09/26/2002	Chiba et al.	136	263	1/29/2002
	G	2002/0017656A1	02/14/2002	Graetzel et al.	257	184	7/30/2001
	H	5,674,325	10/7/1997	Albright et al.	126	250	6/7/1995
	I	5,986,206	11/16/1999	Kambe et al.	136	263	12/10/1997
	J	5,990,415	11/23/1999	Green et al.	136	255	12/8/1995
	K	6,075,203	6/13/2000	Wang et al.	136	256	5/18/1998
↓	L	6,291,763 B1	9/18/2001	Nakamura, Shigeru	136	256	4/5/2000
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
/AH/	M	EP1028475 A1	8/16/2000	Europe	H01L	51/20	EP1028475 A1
/AH/	N	EP1087446 A2	3/28/2001	Europe	H01L	31/0352	EP1087446 A2
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/AH/	O	M. Granstrom, K. Petritsch, A. C. Arias, A. Lux, M. R. Andersson & R. H. Friend. 1998. Laminated fabrication of polymeric photovoltaic diodes. Nature 395, 257-260					
	P	Gebeyehu, D., Brabec, C.J., Saricifti, N.S., Vangeneugden, D., Kiebooms, R., Vanderzande, D., Kienberger, F., and H. Schnindler. 2002. "Hybrid Solar Cells based on dye-sensitized nanoporous TiO2 electrods and conjugated polymers as hole transport materials. Synthetic Metals 123, 279-287.					
	Q	Greg P. Smestad, Stefan Spiekermann, Janusz Kowalik, Christian D. Grant, Adam M. Schwartzberg, Jin Zhang, Laren M. Tolbert, and Ellen Moons. 2002. A technique to compare polythiophene solid-state dye sensitized TiO2 solar cells to liquid junction devices. Solar Energy Materials & Solar Cells, in press.					
	R	Hongyou Fan, Yunfeng Lu, Aaron Stump, Scott T. Reed, Tom Baer, Randy Schunk, Victor Perez-Luna, Gabriel P. Lopez & C. Jeffrey Brinker. 2000. Rapid prototyping of patterned functional nanostructures, Nature 405, 56-60					
↓	S	Alan Sellinger, Pilar M. Weiss, Anh Nguyen, Yunfeng Lu, Roger A. Assink, Weiliang Gong & C. Jeffrey Brinker. 1998. Continuous self-assembly of organic-inorganic nanocomposite coatings that mimic nacre. Nature 394, 256-260.					
EXAMINER  /Asha Hall/				DATE CONSIDERED  05/15/2007			
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/AH/	T	Michael H. Huang, Amer Choudrey and Peidong Yang, "Ag Nanowire Formation within Mesoporous Silica" <i>Chem. Commun.</i> , 2000, 1063-1064
	U	Andrew A. Gewirth, Panos C. Andricacos, and Jay A. Switzer, with John O. Dukovic, editor "Hot Topics in Electrodeposition", The Electrochemical Society <i>Interface</i> • Spring 1998
	V	Heini Saloniemi, "Electrodeposition of PbS, PbSe and PbTe Thin Films" by Heini Saloniemi", <i>VTT Publications</i> 423, December 15, 2000, an electronic copy of which may be accessed at <a href="http://www.inf.vtt.fi/pdf/publications/2000/P423.pdf">http://www.inf.vtt.fi/pdf/publications/2000/P423.pdf</a> .
	W	Huang Y, Duan, X, Wei, Q, & C.M. Lieber, "Directed Assembly Of One-Dimensional Nanostructures Into Functional Networks" <i>Science</i> 291(5504):630-633 (2001).
	X	Byung Hee Hong, Sung Chul Bae, Chi-Wan Lee, Sukmin Jeong, and Kwang S. Kim, "Ultrathin Single-Crystalline Silver Nanowire Arrays Formed in an Ambient Solution Phase", <i>Science</i> 294: 348-351; Published online September 6, 2001
	Y	Justin D. Holmes, Keith P. Johnston, R. Christopher Doty, and Brian A. Korgel, "Control of Thickness and Orientation of Solution-Grown Silicon Nanowires" <i>Science</i> 2000 February 25; 287: 1471-1473
	Z	Lu, Y., Yang, Y., Sellinger, A., Lu, M., Huang, J., Fan, H., Haddad, R., Lopez, G., Burns, A.R., Sasaki, D.Y., Shelnutt, J., and C. J. Brinker, "Self-Assembly of Mesoscopically Ordered Chromatic Polydiacetylene Nanocomposites", <i>Nature</i> 410: 913-917 (2001.)
	AA	Halls et al., "Efficient Photodiodes from interpenetrating Polymer Networks", <i>Nature</i> , Vol. 376 10 August, 1995
	AB	O'Regan et al. "A Low-cost, High-efficiency solar cell based on dye-sensitized colloidal TiO <sub>2</sub> Films", <i>Nature</i> , Vol. 353 pp737-740, 24 October, 1991
	AC	Mapes et al., "Ionic Conductivities of Poly(siloxane) Polymer Electrolytes with Varying Length of Linear Ethoxy Sidechains, Different Molecular Weights, and Mixed Copolymers", <i>Polymer Preprints</i> , 41(1), pp 309-310 (2000)
	AD	Hooper et al., "A Highly Conductive Solid-State Polymer Electrolyte Based on a Double-Comb Polysiloxane Polymer with Oligo(ethylene oxide) Side Chains", <i>Organometallics</i> , Vol. 18, No. 17, August 16, 1999
	AE	Nazeeruddin et al. "Conversion of Light to Electricity by <i>cis</i> -X <sub>2</sub> Bis(2,2'-bipyridyl)-4,4'-dicarboxylate) ruthenium(II) Charge-Transfer Sensitizers (X = Cl <sup>-</sup> , BR <sup>-</sup> , I <sup>-</sup> , CN <sup>-</sup> , and SCN <sup>-</sup> ) on Nanocrystalline TiO <sub>2</sub> Electrodes", <i>Journal of the American Chemical Society</i> 1993, 115, pp 6382-6390 (1993)
	AF	Green et al. "Solar Cell Efficiency Tables (version 11)", <i>Proges in Photovoltaics: Research and Applications</i> , 6, 35-42 (1998).
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	AH	Barbé et al., "Nanocrystalline Titanium Oxide Electrodes for Photovoltaic Applications", <i>Journal of the American Ceramic Society</i> , 80 (12), pp 3157-71 (1997)
	AI	A. P. Li et al., "Polycrystalline Nanopore Arrays with Hexagonal Ordering on Alumium," <i>Journal of Vacuum Science and Technology A</i> 17(4) Jul/Aug 1999
	AJ	M. Steinhart et al, "Polymer Nanotubes by Wetting of ordered Porous Templates," <i>Science</i> vol. 296, 14 June 2002
	AK	S.Z Chu et al., "Synthesis and Characterization of Titania Nanostructures on Glass by Al Anodization and Sol-Gel Process," <i>Chem. Mater.</i> 14, pp 266-272, 2002
✓	AL	S.Z Chu et al., "Fabrication and Characteristics of Ordered Ni Nanostructures on Glass by Anodization and Direct Current Electrodeposition," <i>Chem. Mater.</i> 14, pp 4595-4602, 2002

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/AH/	AM	U.S. Patent Application Serial No. 10/290,119, to Brian M. Sager et al., filed November 5, 2002 and entitled "OPTOELECTRONIC DEVICE AND FABRICATION METHODS"
	AN	U.S. Patent Application Serial No. 10/303,665 to Martin R. Roscheisen et al. entitled "MOLDING TECHNIQUE FOR FABRICATION OF OPTOELECTRONIC DEVICES" and filed on November 22, 2002
	AO	U.S. Patent Application Serial No. 10/319,406 to Brian M. Sager et al., filed on December 11, 2002 and entitled "NANO-ARCHITECTED/ASSEMBLED SOLAR ELECTRICITY CELL"
	AP	Yunfeng Lu, Rahul Ganguli, Celeste A. Drewien, Mark T. Anderson, C. Jeffrey Brinker, Weilang Gong, Yongxing Guo, Hermes Soye, Bruce Dunn, Michael H. Huang & Jeffrey I. Zink. 1997. Continuous formation of supported cubic and hexagonal mesoporous films by sol-gel dip-coating. Science 288, 652-656. (
	AQ	L. Schmidt-Mende, A. Fechtenkötter, K. Mullen, E. Moons, R. H. Friend, J. D. MacKenzie. 2002. Self-Organized Discotic Liquid Crystals for High-Efficiency Organic Photovoltaics. Science 293, 1119-1122
	AR	Wendy U. Huynh, Janke J. Dittmer, A. Paul Alivisatos. 2002. Hybrid Nanorod-Polymer Solar Cells. Science 295, 2425-2427
	AS	Thuc-Quyen Nguyen, Junjun Wu, Vinh Doan, Benjamin J. Schwartz, Sarah H. Tolbert. 2000. Control of Energy Transfer in Oriented Conjugated Polymer-Mesoporous Silica Composites. Science 288, 652-656
	AT	Heeger, A.J. 2002 Semiconducting and metallic polymers: the fourth and fifth generation of polymeric materials. Synthetic Metals 125, 23-42
	AU	Kruger et al, "High Efficiency Solid-State Photovoltaic Device Due to Inhibition of Interface Charge Recombination," <u>Applied Physics Letters</u> , Vol 79, No. 13, 24, pp 2085-2087, September 2001, American Institute of Physics, College Park, MD
	AV	P. Wang, et al. "A Stable Solid-State Dye-Sensitized Solar Cell with an Amphiphilic Ruthenium Sensitizer and Polymer Gel Electrolyte", <u>Nature Materials</u> , Vol. 2, June 2003 pp 402-407 (Published online May 18, 2003), Nature Publishing Group, London, UK
	AW	L. Drummy et al., "Direct Imaging of Defect Structures in Pentacene Nanocrystals" <u>Advanced Materials</u> vol 14, No. 1, pp. 54-57 January 4, 2002, Wiley-VCH, Verlag GmbH, Weinheim, Germany
	AX	F. Cao, et al, "A Solid State, Dye Sensitized Photoelectrochemical Cell", <u>Journal of Physical Chemistry</u> , vol. 99, pp. 17071-17073, 1995,
	AY	B. O'Regan, et al., "Large Enhancement in Photocurrent Efficiency Caused by UV Illumination of the Dye Sensitized Heterojunction TiO <sub>2</sub> /RuLL'NCS/CuSCN: Initiation and Potential Mechanisms", <u>Chemical Materials</u> , Vol. 10, pp. 1501-1509, published on the web, May 20, 1998, American Chemical Society, Washington, DC
	AZ	E. Strathatos et al, "A Quasi Solid State Dye Sensitized Solar Cell Based on a Sol Gel Nanocomposite Electrolyte Containing Ionic Liquid", <u>Chemical Materials</u> , Vol. 15, pp. 1825-1829, published on the web, April 5, 2003, American Chemical Society, Washington, DC
	BA	K. Tennakone et al, "A Dye-Sensitized Nano-Porous Solid-State Photo Voltaic Cell" <u>Semiconductor Science and Technology</u> , vol. 10, pp. 1689-1693, IOP Publishing, UK 1995
	BB	D. Gong et al., titanium oxide nanotube arrays prepared by anodic oxidation," in <u>J. Mater. Res.</u> , Vol 16, No 12, pp. 3331-3334, Dec., 2001, Materials Research Society
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	BD	V. Zwillling et al., "Structure and Physiochemistry of Anodic Oxide Films on Titanium and TA6V Alloy," in <u>Surface and Interface Analysis</u> , Vol 27, pp 629-637, 1999, John Wiley and Sons, Ltd.
✓	BE	V. Zwillling et al., "Anodic oxidation of titanium and TAV6 alloy in chromic media. An electrochemical approach," in <u>Electrochimica Acta</u> , Vol 45, pp 921-929, 1999, Elsevier Science, Ltd.

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